

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 2391-1-2

SERIAL NO. 07/911,760

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT BARCLAY

FILING DATE July 10, 1992

GROUP ART 1302

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
AA						
AB						
AC						
AD						
AE						
AF						
AG						
AH						
AI						
AJ						
AK						
AL						
AM						
AN						

RECEIVED
OCT 23 1992
GROUP 130

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
						YES	NO
AO							
AP							
AQ							
AR							
AS							
AT							
AU							
AV							

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

AW	Ainsworth, "Introduction and Keys to Higher Taxa", pp. 1-7, 1973, in <i>The Fungi. An Advanced Treatise</i> , Vol. 4B, (G.C. Ainsworth et al. eds., Academic Press)
AX	Bahnweg et al., "A New Approach to Taxonomy of the Thraustochytriales and Labyrinthulales", pp. 131-140, 1986, in <i>The Biology of Marine Fungi</i> , (S.T. Moss ed., Cambridge University Press)
AY	Bartnicki-Garcia, "The Cell Wall: A Crucial Structure in Fungal Evolution", pp. 389-403, 1988, in <i>Evolutionary Biology of the Fungi</i> , (A.D.M. Rayner et al. eds., Cambridge University Press)
AZ	Cavalier-Smith, "The Origin of Nuclei and of Eukaryotic Cells", pp. 463-468, 1975, <i>Nature</i> , Vol. 256

EXAMINER

Anthony Uebler

DATE CONSIDERED

8/6/93

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 2391-1-2

SERIAL NO. 07/911,760

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT BARCLAY

FILING DATE July 10, 1992

GROUP ART 1302

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
	AA						
	AA						
	AE						
	AE						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
							YES	NO
	AO							
	AP							
	AQ							
	AR							
	AS							
	AT							
	AU							
	AV							

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

<i>Aw</i>	AW	Cerda-Olmeda et al., "A Biography of Phycomyces", pp. 7-26, 1987, in <i>Phycomyces</i> , (Cerda-Olmeda et al. eds., CSH Laboratory)
<i>Aw</i>	AX	Dick, "Saprolegniales", pp. 113-144, 1973, in <i>The Fungi. An Advanced Treatise</i> , (G.C. Ainsworth et al. eds., Academic Press)
<i>Aw</i>	AY	Ellenbogen, "Polyunsaturated Fatty Acids of Aquatic Fungi: Possible Phylogenetic Significance", pp. 805-811, 1969, <i>Comp. Biochem. Physiol.</i> , Vol. 29
<i>Aw</i>	AZ	Emerson, "Current Trends of Experimental Research in the Aquatic Phycomycetes", pp. 169-200, 1950, <i>Ann. Rev. Micro.</i> , Vol. 4

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 2391-1-2

SERIAL NO. 07/911,760

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT BARCLAY

FILING DATE July 10, 1992

GROUP ART 1302

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
	AA					
	AB					
	AC					
	AD					
	AC					
	AF					
	AC					
	AB					
	AI					
	AJ					
	AK					
	AC					
	AM					
	AB					

RECEIVED
OCT 28 11:11-89
GROUP 130

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
						YES	NO
	AS						
	AB						
	AQ						
	AR						
	AS						
	AT						
	AU						
	AV						

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

AW	Erwin, "Comparative Biochemistry of Fatty Acids in Eukaryotic Microorganisms", pp. 41-143, 1973, in <u>Lipids and Biomembranes of Eukaryotic Microorganisms</u> , (J. Erwin ed., Academic Press)
AX	Findlay et al., "Biochemical Indicators of the Role of Fungi and Thraustochytrids in Mangrove Detrital Systems", pp. 91-103, 1986, in <u>The Biology of Marine Fungi</u> , (S.T. Moss ed., Cambridge University Press)
AY	Fuller, et al., "Isolation and Pure Culture Study of Marine Phycomycetes", pp. 745-756, 1964, <u>Mycologia</u> , Vol. 56
AZ	Gellerman et al., "Methyl-Directed Desaturation of Arachidonic to Eicosapentaenoic Acid in the Fungus, <u>Saprolegnia Parasitica</u> ", pp. 23-30, 1979, <u>Biochim. Biophys. Acta</u> , Vol. 573

EXAMINER

Anthony Weier

DATE CONSIDERED

8/5/93

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 2391-1-2

SERIAL NO. 07/911,760

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT BARCLAY

FILING DATE July 10, 1992

GROUP ART 1302

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
							YES	NO
	AS							
	AF							
	AD							
	AR							
	AS							
	AT							
	AU							
	AV							

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

AW	Goldstein, "Development and Nutrition of New Species of Thraustochytrium", pp. 271-279, 1963, <i>Am. J. Bot.</i> , Vol. 50
AX	Goldstein et al., "Biology of a Problematic Marine Fungus, <i>Dermocystidium</i> sp. II. Nutrition and Respiration", pp. 468-472, 1969, <i>Mycologia</i> , Vol. 61
AY	Goldstein et al., "Biology of a Problematic Marine Fungus, <i>Dermocystidium</i> sp. I. Development and Cytology", pp. 1-11, 1966, <i>Archiv für Mikrobiologie</i> , Vol. 53.1
AZ	Henderson et al., "Lipid Composition and Biosynthesis in the Marine Dinoflagellate <i>Cryptothecodinium Cohnii</i> ", pp. 1679-1683, 1988, <i>Phytochemistry</i> , Vol 27, No. 6

EXAMINER

Anthony Weier

DATE CONSIDERED

8/5/93

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 2391-1-2

SERIAL NO. 07/911,760

INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)

APPLICANT BARCLAY

FILING DATE July 10, 1992

GROUP ART 1302

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
	AA					
	AB					
	AL					
	AR					
	AL					
	AF					
	AL					
	AR					
	AI					
	AJ					
	AB					
	AL					
	AM					
	AR					

RECEIVED
32 OCT 23 1111 30
GROUP 130

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
							YES	NO
	AR							
	AR							
	AQ							
	AR							
	AB							
	AT							
	AU							
	AV							

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

AW	Hori et al., "The Nucleotide Sequence of 5S rRNA from a Cellular Slime Mold Dictyostelium Discoideum" pp. 5535-5539, 1980, Nucl. Acids Res., Vol. 8
AX	Hunter, "Fish Oil and Other Omega-3 Sources", pp. 1592-1596, 1987, J. Am. Oil Chem. Soc., Vol. 64
AY	Kates, "Techniques of Lipidology: Isolation, Analysis and Identification of Lipids", pp. 186-278, 1986, Laboratory Techniques in Biochemistry and Molecular Biology, Vol. 3
AZ	Kyle, "Microalgae as a Source of EPA-Containing Oils", p. 1251, 1987, J. Am. Oil Chem. Soc., Vol. 64

EXAMINER

Anthony Ubier

DATE CONSIDERED

8/5/93

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

APP. DOCKET NO. 2391-1-2

SERIAL NO. 07/911,760

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT BARCLAY

FILING DATE July 10, 1992

GROUP ART 1302

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
	AA					
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					
	AL					
	AM					
	AN					

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
						YES	NO
	AO						
	AP						
	AQ						
	AR						
	AS						
	AT						
	AU						
	AV						

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

AW	Lepage et al., "Improved Recovery of Fatty Acid Through Direct Transesterification Without Prior Extraction or Purification", pp. 1391-1396, 1984, J. Lipid Res., Vol. 25
AX	Mannella et al., "Interrelatedness of 5S RNA Sequences Investigated by Correspondence Analysis", pp. 228-235, 1987, J. Mol. Evol., Vol. 24
AY	Miller, "Isolation and Pure Culture of Aquatic Phycomycetes by Membrane Filtration", pp. 524-527, 1967, Mycologia, Vol. 59
AZ	Moss, "Biology and Phylogeny of the Labrinthulales and Thraustochytriales", pp. 105-129, 1986, in The Biology of Marine Fungi, (S.T. Moss ed., Cambridge University Press)

EXAMINER

Anthony Weier

DATE CONSIDERED

8/5/93

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 2391-1-2

SERIAL NO. 07/911,760

INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)

APPLICANT BARCLAY

FILING DATE July 10, 1992

GROUP ART 1302

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
	AA					
	AB					
	AC					
	AQ					
	AE					
	AF					
	AG					
	AI					
	AJ					
	AK					
	AL					
	AM					
	AN					
	AO					

RECEIVED
92 OCT 28 AM 11:39
GROUP 130

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
						YES	NO
	AS						
	AS						
	AQ						
	AK						
	AS						
	AT						
	AU						
	AV						

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

AW	Perkins, "Phylogenetic Considerations of the Problematic Thraustochytriales-Labrinthulid-Dermocystidium Complex Based on Observations of Fine Structure", pp. 45-63, 1974, Veroff. Inst. Meeresforsch. Bremerh. Suppl., Vol. 5
AX	Pigot, "The Need to Improve Omega-3 Content of Cultured Fish", pp. 63-68, 1989, World Aquaculture, Vol. 20
AY	Pohl et al., "Fatty Acids and Lipids of Marine Algae and the Control of Their Biosynthesis by Environmental Factors", pp. 473-523, 1979, Marine Algae in Pharmaceutical Science, (Hoppe et al. eds.)
AZ	Ryther, "Cultivation of Macroscopic Marine Algae", pp. 79-88, 1983, Solar Energy Research Institute Aquatic Species Program Review. Proc of the March 1983 Principal Investigators Meeting, SERI/CP-231 1946

EXAMINER

Anthony Ukleiev

DATE CONSIDERED

8/5/93

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 2391-1-2

SERIAL NO. 07/911,760

INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)

APPLICANT BARCLAY

FILING DATE July 10, 1992

GROUP ART 1302

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
	AA					
	AB					
	AG					
	AH					
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					
	AE					
	AM					
	AN					

RECEIVED
9 OCT 23 AM 11:39
GROUP 130

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
						YES	NO
	AI						
	AH						
	AG						
	AK						
	AS						
	AT						
	AU						
	AV						

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

AW	AW	Schlenk, "Urea Inclusion Compounds of Fatty Acids", pp. 243-267, 1954, <u>Prog. Chem. Fats and Other Lipids</u> , Vol. 2
AX	AX	Schneider, "Cultivation of Micro-organisms. Section 3.2: Fungi", pp. 337-345, 1976, in <u>Marine Ecology</u> , Vol. 3, Part 1. Cultivation, (O. Kinne ed., Wiley and Sons)
AY	AY	Simopoulos et al. (eds.), <u>Health Effects of Polyunsaturated Fatty Acids in Seafoods</u> , Chaps. 2-5, 7, 17 1986, Academic Press)
AZ	AZ	Sorokin, "Dry Weight, Packed Cell Volume and Optical Density", pp. 321-343, 1973 in <u>Handbook of Physiological Methods: Culture Methods and Growth Measurements</u> , (J.R. Stein ed., Cambridge University Press)

EXAMINER

Anthony Weier

DATE CONSIDERED

8/5/93

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 2391-152

SERIAL NO. 07/911,760

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT BARCLAY

FILING DATE July 10, 1992

GROUP ART 1302

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
	AA					
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					
	AR					
	AI					
	AJ					
	AK					
	AL					
	AM					
	AN					

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
						YES	NO
	AO						
	AR						
	AQ						
	AR						
	AS						
	AT						
	AU						
	AV						

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

AW		Sparrow, Aquatic Phycomycetes, pp. 36-39, 1960, University of Michigan Press
AX		Wasef, "Fungal Lipids", pp. 159-232, 1977, Adv. Lipid Res., Vol. 15
AY		Weete, "Fatty Acids", pp. 49-95, 1980, in Lipid Biochemistry of Fungi and Other Organisms, (Plenum Press)
AZ		Yamada et al., "Production of Arachidonic Acid and Eicosapentaenoic Acid by Microorganisms", p. 1254, 1987, J. Am. Oil Chem. Soc., Vol. 64

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.